

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028169**Date Inspected:** 12-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** Salvador Merino**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

The QAI observed ABF/JV qualified welder Wai Kitlai #2953 performing Carbon Arc Gouging (CAG) for the repair of the deck panel drop-in splice designated as 13E-E2.8. The ABF/JV QC inspector Salvador Merino was observed performing magnetic particle testing (MT) in way of the repair excavation at Y=9990 first time repair,

The ABF qualified welder was observed later in the shift performing Shielded Metal Arc Welding (SMAW) of the repair area in the 4G position utilizing the Caltrans approved Welding Procedure Specifications ABF-WPS-D1.5-1004-Repair. The weld and surrounding area was brought to temperature by the use of inductions heaters and maintained throughout welding. Due to the first time repair at these locations approval for repair (RWR) of this weld was not required.

The QAI noted and periodically observed ABF/JV qualified welder Jia Yan #1571 performing Carbon Arc Gouging (CAG) in order to remove the backing bar from face B of the edge plate splice at panel point 121.6 for the weld designated as 13E-PP121.6-G. The ABF/JV QC inspector Salvador Merino was then observed performing magnetic particle testing (MT) of the backgouged root after the groove was ground to bright metal. No indications were observed by QC at the time of inspection.

Welder Jia Yan #1571 was then observed welding the backgouged portion of the edge plate splice by the use of

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Shielded Metal Arc Welding (SMAW) in the 3G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1040-C. The weld surface and surrounding area was brought to temperature by the use of a gas torch and was confirmed by QC inspector Salvador Merino prior to welding.

During the Quality Assurance (QA) random in-process visual inspection of the welding operations on the OBG East End, the QA inspector observed ABF personnel welding the edge plate field splice between lift 13E and 14E (EP3018 to EP3028) with planar misalignment measuring from 3mm~14mm. The edge plate thickness at this connection is 20mm and the weld is designated as 13E/14E-G. The QA task leader was notified in writing of the non-compliant issue for further discussion with the Caltrans Structural Materials Representative (SMR) and ABF Management.

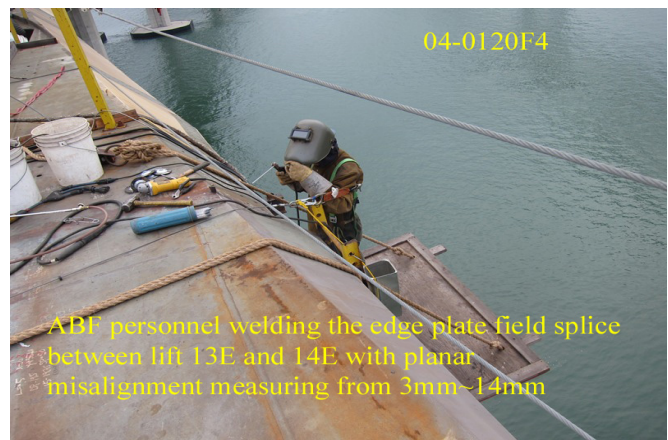
The QA inspector observed at random intervals, ABF/JV qualified welder Chris Bowles #9317 Shielded Metal Arc Welding (SMAW) in the 2G/3G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1040A for the welding in the 3G position and ABF-WPS-D1.5-1050A for the 2G position. The welding observed was for the floor beam web splice at panel point 120 and is designated as 13E-PP120-E2.0-FBW1 and 13E-PP120-E2.0-FBW2. The weld surface and surrounding area was brought to temperature by the use of a gas torch. The ABF QC inspector Fred Michaels was observed monitoring the welding parameters at the beginning of the shift.

The QAI spent a portion of this shift reviewing and documenting the status and completion of various production welding tracking logs for lift 13W/14W and 13E-14E drop-in deck work currently in-process. The QA recorded the information on the OBG tracking log.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As noted above



### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Patterson,Rodney	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell,Bill	QA Reviewer
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